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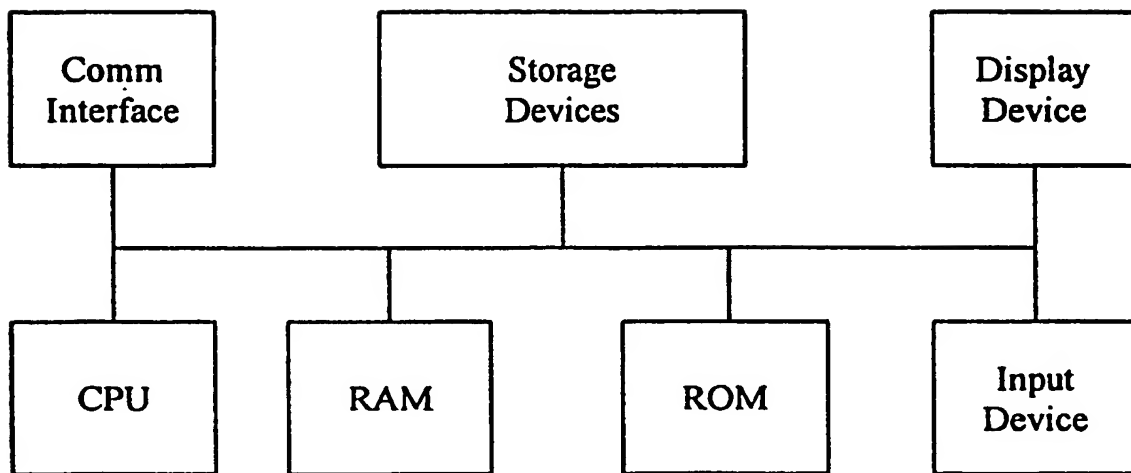


FIG. 1A

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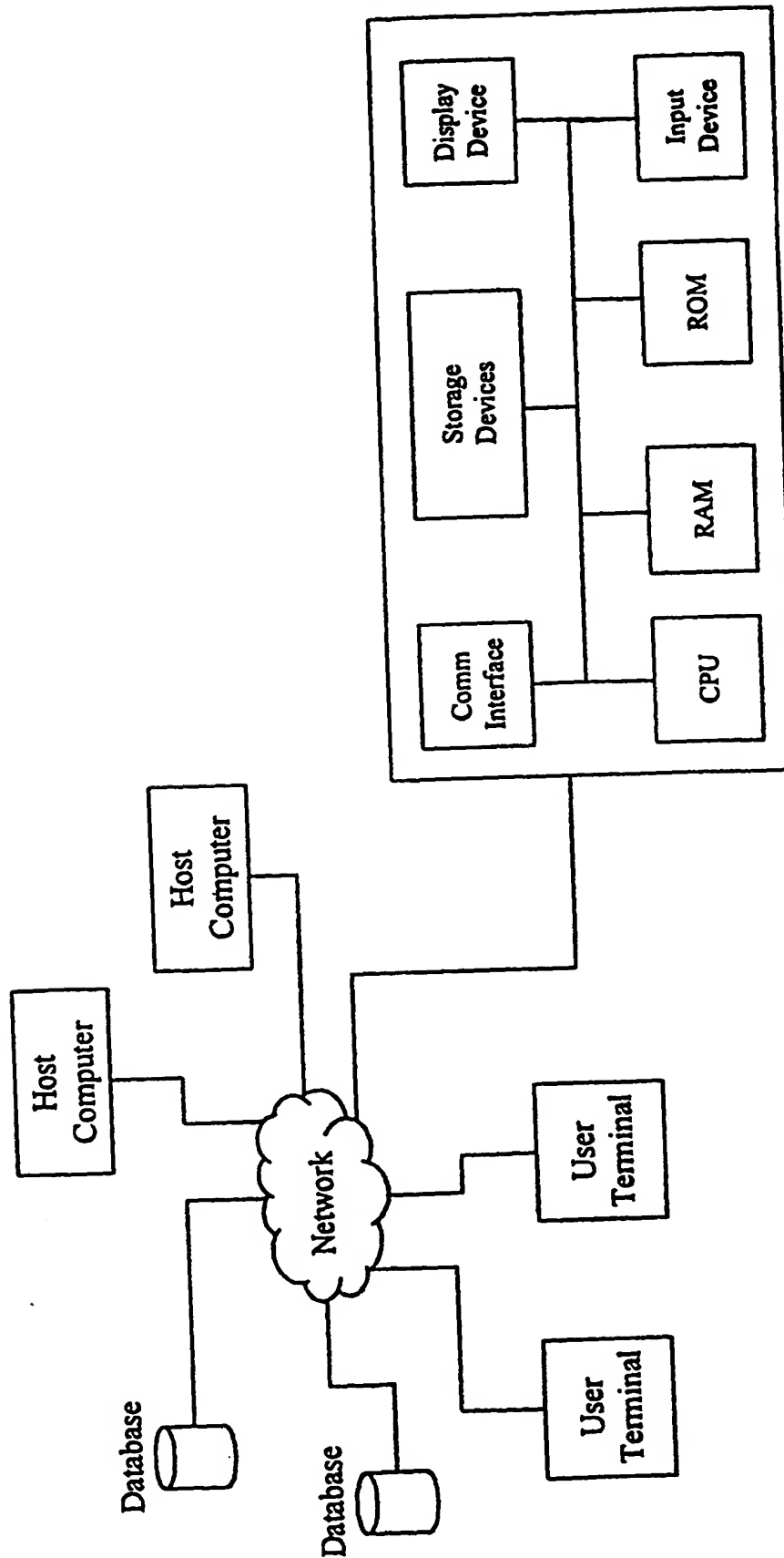
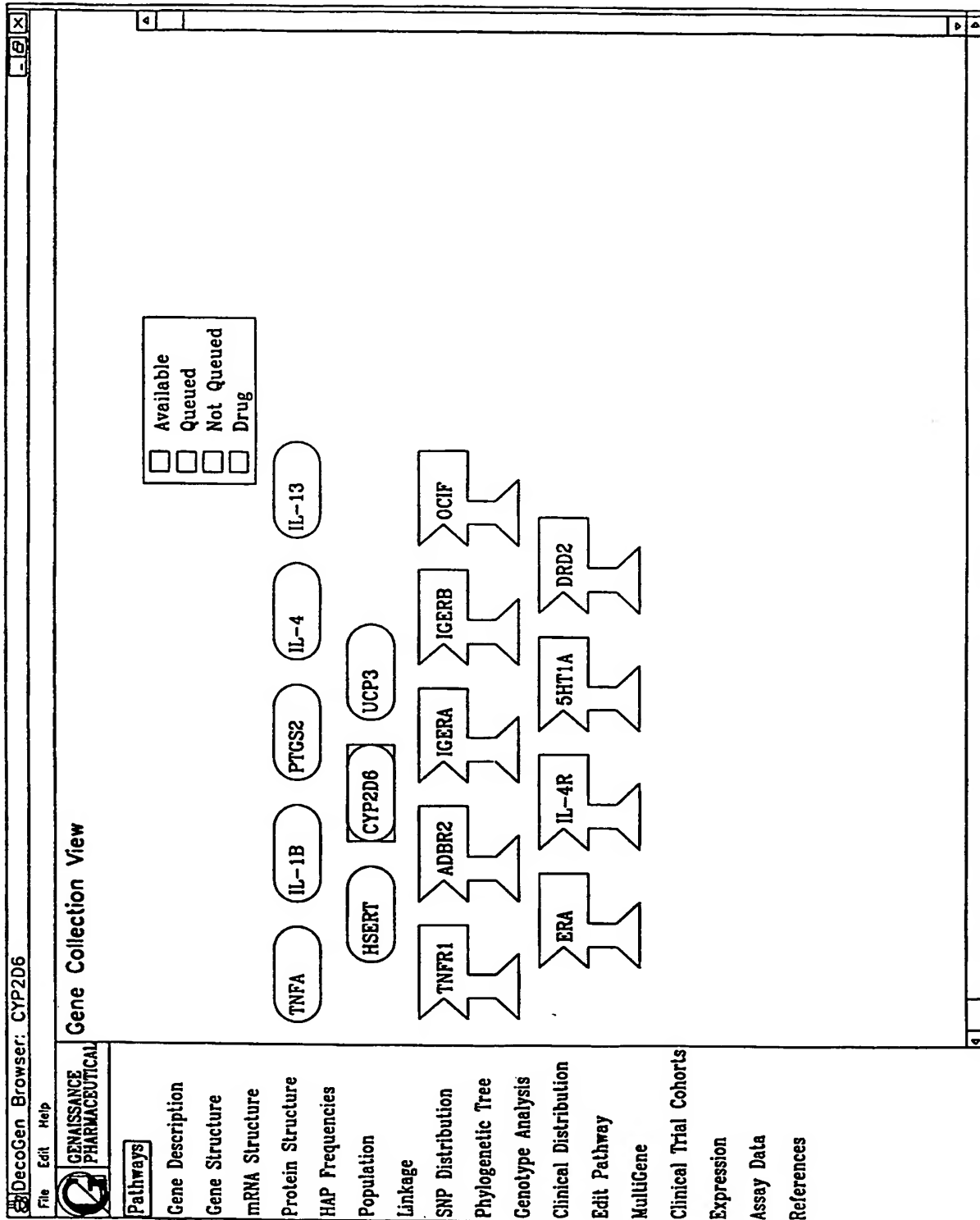


FIG. 1B

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FIG. 2



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FIG. 3

DecoGen Browser: CYP2D6

File Edit Help

GENVAISSANCE PHARMACEUTICAL

Pathways

Gene Description

Gene Structure

mRNA Structure

Protein Structure

HAP Frequencies

Population

Linkage

SNP Distribution

Phylogenetic Tree

Genotype Analysis

Clinical Distribution

Edit Pathway

MultiGene

Clinical Trial Cohorts

Expression

Assay Data

References

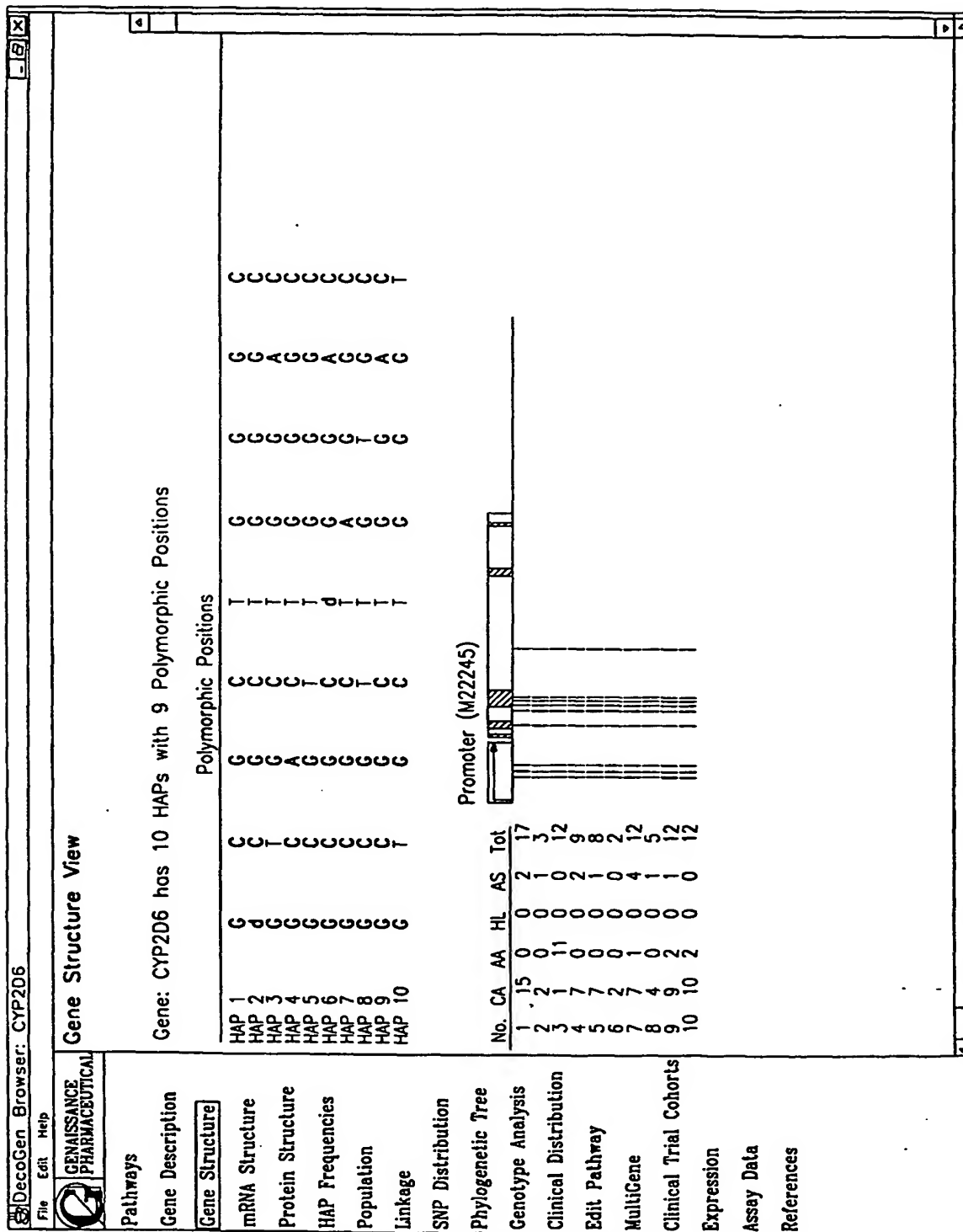
Gene Description View

Name	CYP2D6
Definition	Human cytochrome P450 IID6 (CYP2D6) gene
Function	Metabolic enzyme
Organism	Homo Sapiens
Length	9432
No Features	13
Population Size	46
No. Haplotypes	10
Nucleotide Polymorphism (Heta)	5.6E-4 +/- 3.1E-4
Nucleotide Diversity (pi)	2.8E-4 +/- 1.8E-4

SUBSTITUTE SHEET (RULE 26)

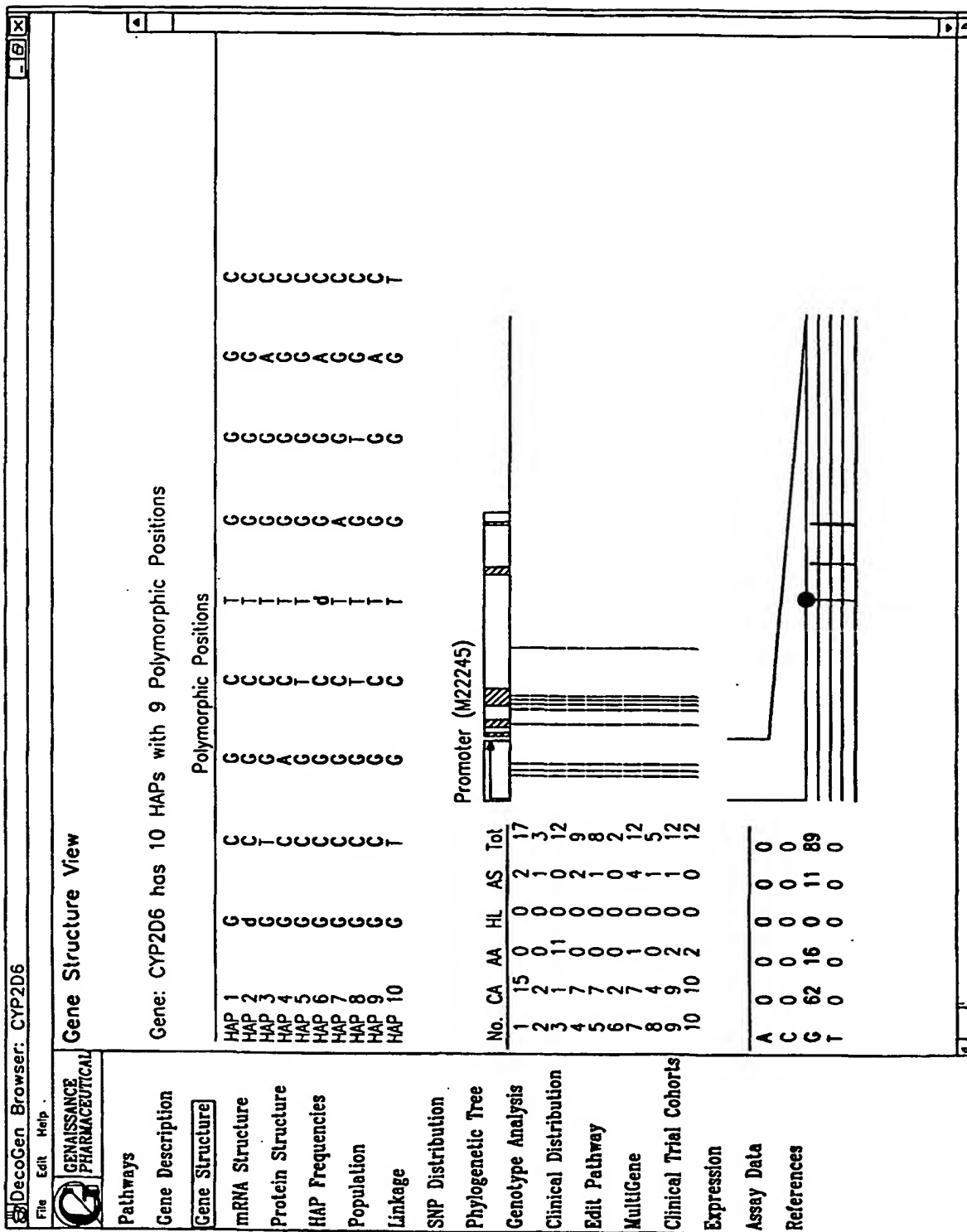
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FIG. 4a



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FIG. 4b



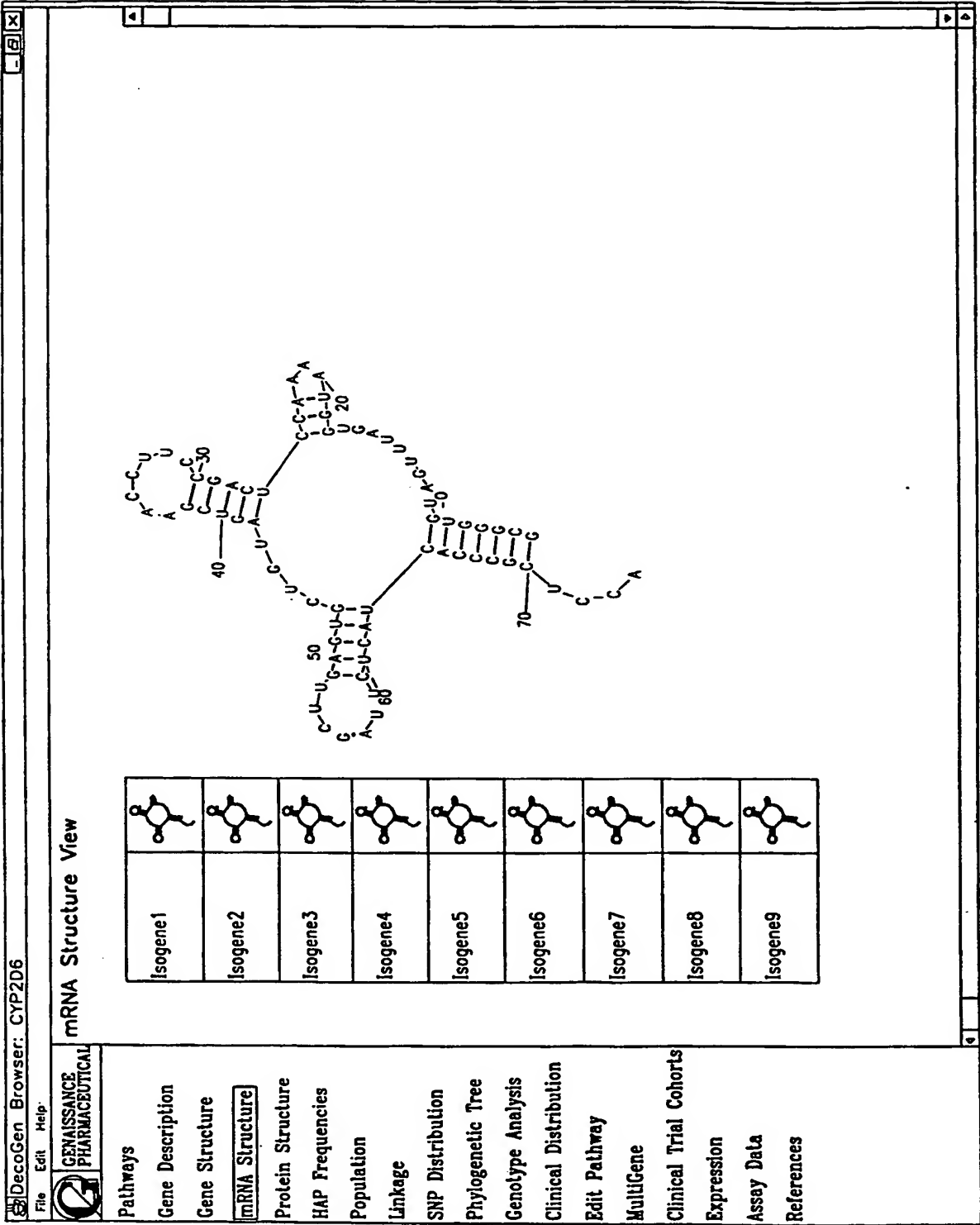
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Gene Feature Sequence Alignment: Gene (M33388)										
File	Edit	Font	View	Colour	Calculate	Help				
HAP 1							510	520	530	540
HAP 2							550	560	570	580
HAP 3							590	600		
HAP 4										
HAP 5										
HAP 6										
HAP 7										
HAP 8										
HAP 9										
done										
Redraw time= 10 ms										

FIG. 5

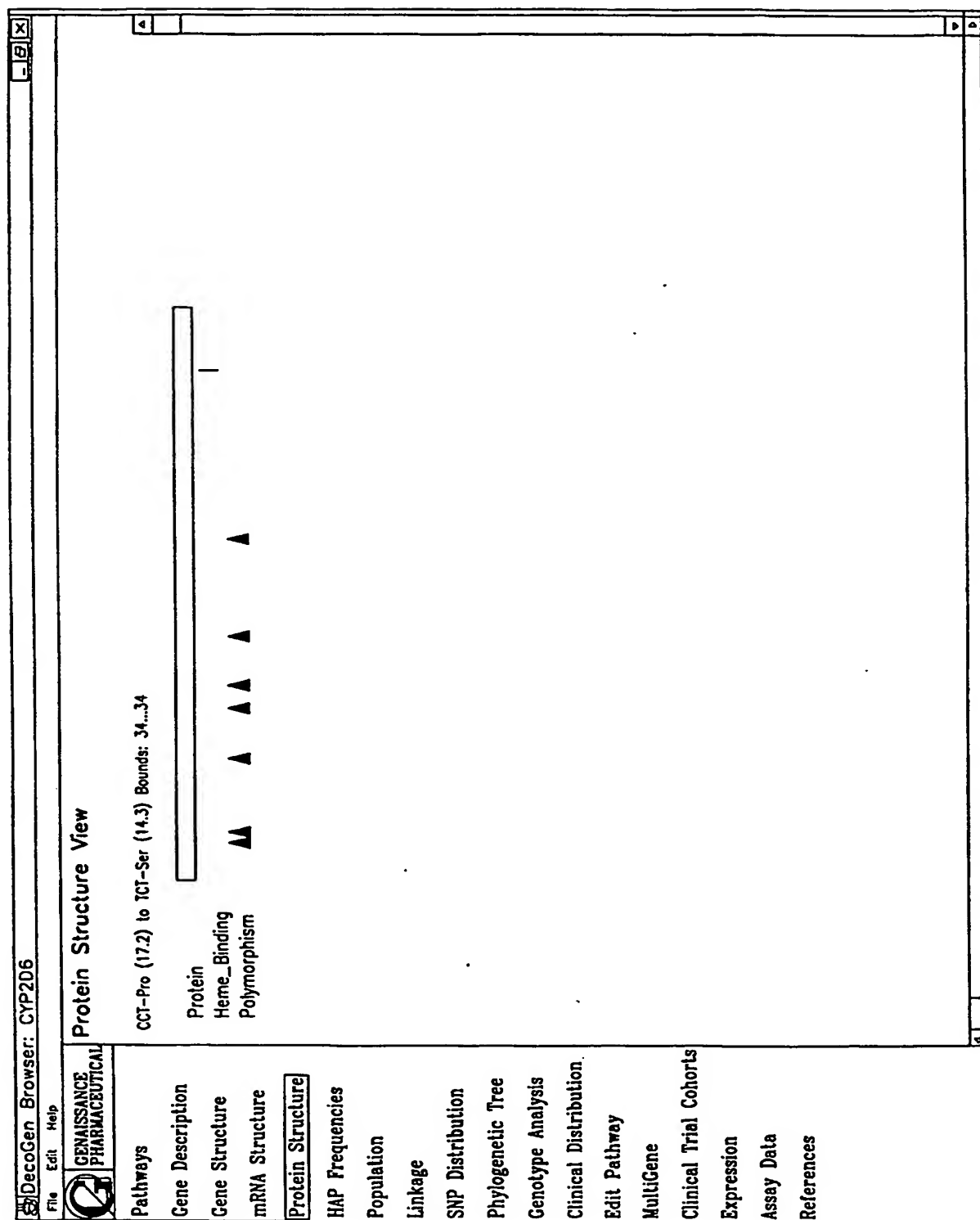
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FIG. 6



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FIG. 7



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FIG. 8

DecoGen Browser: CYP2D6									
File Edit Help									
GENAissance PHARMACEUTICAL									
Population View									
Pathways	PID	Ethnicity	Age	Gender	HAP 1	HAP 2	Test		
Gene Description	UP070	CA	99	F	GGCTGGGC	GGCTGGGC	0.1		
Gene Structure	UP072	CA	99	F	dCGCTGGGC	GGCTGGGC	0.2		
mRNA Structure	UP074	CA	99	F	GGCTGGGC	GGCTGGGC	0.2		
Protein Structure	UP132	CA	99	M	GTGCTGGGT	GTGCTGGGT	0.3		
HAP Frequencies	UP133	CA	99	M	GGCTGGGC	GTGCTGGGT	0.2		
Population	UP134	CA	99	F	GGCTGGGC	GGCTGGGC	0.1		
Linkage	UP137	CA	99	M	GTGCTGGGT	GTGCTGGGT	0.1		
SNP Distribution	UP009	CA	99	F	GGCTGGGC	GGCTGGGC	0.1		
Phylogenetic Tree	UP014	CA	99	F	dCGCTGGGC	GGCTGGGC	0.3		
Genotype Analysis	UP020	CA	99	F	GTGCTGGGT	GTGCTGGGT	0.2		
Clinical Distribution	UP021	CA	99	M	GGCTGGGC	GGCTGGGC	0.4		
Edit Pathway	UP022	CA	99	M	GGCTGGGC	GGCTGGGC	0.3		
MultiGene	OR001	AS	99	M	dCGCTGGGC	GGCTGGGC	0.2		
Clinical Trial Cohorts	OR002	AS	99	M	GGCTGGGC	GGCTGGGC	0.3		
Expression	OR004	AS	99	F	GGCTGGGC	GGCTGGGC	0.2		
Assay Data	OR006	AS	99	F	GGCTGGGC	GGCTGGGC	0.1		
References	WT003	CA	99	F	GGCTGGGC	GGCTGGGC	0.2		
	WT005	CA	99	M	GGCTGGGC	GGCTGGGC	0.2		
	WT007	CA	99	M	GGCTGGGC	GGCTGGGC	0.4		
	UP012	CA	99	F	GGCTGGGC	GGCTGGGC	0.1		
	UP135	CA	99	M	GGCTGGGC	GGCTGGGC	0.2		